



**The "Nine Criteria" used to evaluate clean up alternatives in the Superfund Program**

1. Overall Protection of Human Health and Environment
2. Compliance with Federal, State, and local standards
3. Long-term Effectiveness and Permanence
4. Reduction in Toxicity, Mobility, and Volume Through Treatment
5. Short Term Effectiveness
6. Implementability
7. Cost
8. State Acceptance
9. Community Acceptance

## **6.0 DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES**

This section provides a detailed analysis of the remedial alternatives developed in Section 5. The alternatives are evaluated against the threshold and primary balancing criteria specified in the NCP and the FS Guidance (EPA, 1988a) to ensure that the selected remedial alternative will: protect human health and the environment; comply with or include a waiver of ARARs; be cost-effective; utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and address the statutory preference for treatment as a principal element. The modifying criteria of State and Community acceptance will be addressed by EPA after this FS is completed and prior to the finalization of the ROD, and will be based on comments received by EPA during a public comment period.

The nine FS evaluation criteria specified in the NCP are:

- **Threshold Criteria**
  - Overall Protection of Human Health and the Environment
  - Compliance with ARARs
- **Primary Balancing Criteria**
  - Short-Term Effectiveness
  - Long-Term Effectiveness and Permanence
  - Reduction of Toxicity, Mobility and Volume Through Treatment
  - Implementability
  - Cost
- **Modifying Criteria**
  - State Acceptance
  - Community Acceptance

These criteria are further defined by a set of sub criteria and factors described in the FS guidance (EPA, 1988a). While all nine criteria are important, they are weighed differently in the decision-making process depending on whether they describe a required level of performance (threshold criteria), provide

for consideration of technical merits (primary balancing criteria), or involve the evaluation of non-EPA reviewers that may influence an EPA decision (modifying criteria). Explanations of the criteria, along with a generalized summary of these sub criteria and factors, are presented below.

### **Overall Protection of Human Health and the Environment**

The evaluation of the overall protection of human health and the environment is based on a composite of factors assessed under the evaluation criteria. The criteria specifically considered are: short-term effectiveness, long-term effectiveness and permanence, and compliance with ARARs.

### **Compliance with ARARs**

This evaluation analyzes the expected performance of each alternative in meeting the Federal and State standards, or limitations that constitute applicable or relevant and appropriate requirements (ARARs).

"Applicable Requirements" are those:

Cleanup standards, standards of control, or other substantive environmental protection requirements, criteria or limitations promulgated under Federal environmental or State environmental or facility siting laws that specifically address a hazardous substance, pollutant or contaminant at a CERCLA site. Only those State standards that are identified by a State in a timely manner and that are more stringent than Federal requirements may be applicable. (NCP, 40 CFR § 300.5; Compliance with Other Laws Manual, p. 1-10.)

"Relevant and Appropriate Requirements" are those:

Cleanup standards, standards of control, and other substantive requirements, criteria or limitations promulgated under Federal environmental or State environmental or facility siting laws that, while not applicable to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site so that their use is well suited to the particular site. Only those State standards that are identified in a timely manner and are more stringent than

Federal requirements may be relevant and appropriate. (NCP, 40 CFR § 300.5; Compliance with Other Laws Manual, p. 1-10.)

The following ARARs are considered in the evaluation of each alternative: chemical-specific (e.g., air quality standards); and action-specific (e.g., solid waste disposal standards). No location-specific ARARs were identified.

The NCP also requires the identification of other materials that, while not ARARs, may be useful in evaluating appropriate remediation goals or approaches. The "to be considered" (TBC) category generally is defined to include advisories, criteria, or guidance developed by EPA, other Federal agencies, or States that, while not legally binding requirements, may be useful in developing CERCLA remedies (see Section 300.400 (g)(3)). The NCP provides that, unlike ARARs, the use of TBCs is discretionary and that they are to be evaluated on an "as appropriate" basis. The NCP also confirms that the role of TBCs should not be tantamount to that of cleanup standards. Because TBCs are, by definition, neither promulgated nor enforceable, they do not have the same status under CERCLA as ARARs. TBCs may, however, be useful in evaluating protectiveness or how to carry out certain actions or requirements.

### **Short-Term Effectiveness**

This evaluation criterion addresses the effects of the remedial alternative during the construction and implementation phase until the remedial objectives are met. Alternatives are evaluated with respect to their potential effects on human health and the environment during implementation of the remedial action. As specified in the CERCLA guidance, the short-term impacts of each remedial alternative are assessed considering the following factors:

- Short-term risks that might be posed to the community during implementation of remedial action;
- Potential impacts on workers during remedial action and the effectiveness and reliability of protective measures;

- Potential environmental impacts of the remedial action and the effectiveness and reliability of mitigative measures during implementation; and
- The time until protection is achieved.

### **Long-Term Effectiveness and Permanence**

Evaluation of long-term effectiveness and permanence considers the risks remaining after the response objectives have been met. Factors considered, as appropriate, include the following:

- Magnitude of residual risk remaining from untreated waste or treatment residuals remaining at the conclusion of the remedial activities.
- Adequacy and reliability of controls. This factor assesses the adequacy and suitability of controls, if any, that are used to manage untreated wastes that remain at the site. The long-term reliability of management controls for providing continued protection are also assessed, including the potential need to replace technical components of the alternative, and the potential exposure pathway and the risks, should the remedial action need replacement. In accordance with NCP requirements (40 CFR 300.430) and the FS Guidance (EPA, 1988a), the principal factors considered are:
  - The likelihood that the technologies will meet required process efficiencies or performance specifications;
  - The type of long-term management required;
  - Requirements for long-term monitoring;
  - Operation and maintenance functions;
  - Difficulties and uncertainties associated with long-term operation and maintenance;
  - The potential need for replacement of technical components;
  - The magnitude of the threats or risks should the remedial action need replacement;
  - The degree of confidence that controls can adequately handle potential problems; and

- The uncertainties associated with land disposal of residuals and untreated wastes.

### **Reduction of Toxicity, Mobility or Volume Through Treatment**

The FS Guidance identifies the following factors to be considered in the evaluation of the degree to which remedial alternatives reduce the toxicity, mobility or volume of potentially hazardous materials through treatment:

- The treatment processes the alternatives employ and materials they will treat;
- The amount of hazardous materials that will be destroyed or treated, including how the principal threat(s) will be addressed;
- The degree of expected reduction in toxicity, mobility, or volume of the material due to treatment, measured as a percentage of reduction (or order of magnitude);
- The degree to which the treatment is irreversible;
- The type and quantity of residuals that will remain following treatment, considering the persistence, toxicity, mobility, and propensity to bioaccumulate of such hazardous substances and their constituents; and
- Whether the alternative would satisfy the statutory preference for treatment as a principal element of the remedy.

### **Implementability**

This criterion addresses the technical and administrative feasibility of implementing each remedial alternative and the availability of various services and materials required during its implementation. As specified in the CERCLA guidance, the evaluation of implementability includes three categories of analysis and a total of nine factors:

- Technical Feasibility
  1. Ability to construct and operate the technology

2. Reliability of the technology
  3. Ease of undertaking additional remedial actions, if necessary
  4. Ability to monitor the effectiveness of the remedy
- Administrative Feasibility
    5. Ability to obtain approvals from other agencies
    6. Coordination with other agencies
  - Availability of Services and Materials
    7. Availability of off-site treatment, storage and disposal services and capacity
    8. Availability of necessary equipment and specialists
    9. Availability of new technology under consideration

## Cost

For each alternative, a -30 to +50 percent cost estimate is developed in accordance with procedures in the *Remedial Action Costing Procedures Manual*. Cost estimates for each alternative are based on conceptual engineering and design and are expressed in terms of 2001 dollars. The cost estimate for a remedial alternative consists of four principal elements:

- Remedial action cost – Remedial action cost consists of direct (construction), indirect (non-construction and overhead) costs, and costs associated with the implementation of community health program. Direct costs include the cost for equipment, labor, and materials incurred to develop, construct, and implement a remedial action. Indirect costs are expenditures for engineering, financial, and other services that are not actually a part of construction but are required to implement a remedial alternative. These items are included in the detailed cost analysis. As discussed in Appendix B, remedial action includes engineering actions (i.e., soil removal and/or tilling) and setting up and implementing a community health program.
- Operation and maintenance cost - Operation and maintenance (O&M) cost refers to post-remedial action cost items necessary to ensure the continued effectiveness of a remedial action. For the alternatives under consideration in this FS there are no O&M activities other than periodic review. Long-term actions, such as implementation of the community health program, are considered to be a component of remedial action.

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- Cost for a 5-year review - Section 121(c) of CERCLA, as amended, states that a 5-year review of a remedial action is required if that remedial action results in hazardous constituents remaining on-site.
- Present worth analysis - This analysis is used to evaluate the remedial action and O&M costs of a remedial alternative based on its present worth. A present worth analysis compares expenditures for various alternatives where those expenditures occur over different time periods. By discounting all costs to a common base year, the costs for different remedial action alternatives can be compared based on a single cost figure for each alternative. The total present worth for a single alternative is equal to the full amount of all costs incurred through the end of the first year of operation (capital cost), plus the series of expenditures in following years reduced by the appropriate future value/present worth discount factor. This analysis allows the comparison of remedial alternatives on the basis of a single cost representing an amount that, if invested in the base year and disbursed as needed, would be sufficient to cover all costs associated with the remedial action over its planned life. A discount rate of 5 percent is assumed for base calculations (EPA, 1988a). The discount rate represents the anticipated difference between the rate of inflation and investment return.

#### **State and Community Acceptance**

As discussed in the FS Guidance, EPA will formally evaluate community and State acceptance following review of comments received on the Proposed Plan when publicly available.

The following subsections provide an analysis of each of the remedial alternatives developed for VB/70 OU1. A summary of the principal components of each alternative is provided, followed by an assessment of the alternative against the threshold and balancing evaluation criteria



the environment primarily by preventing or controlling exposure to hazardous substances, pollutants, or contaminants, through engineering controls, for example, containment, and, as necessary, institutional controls to protect human health and the environment and to assure continued effectiveness of the response action.

(4) For ground-water response actions, the lead agency shall develop a limited number of remedial alternatives that attain site-specific remediation levels within different restoration time periods utilizing one or more different technologies.

(5) The lead agency shall develop one or more innovative treatment technologies for further consideration if those technologies offer the potential for comparable or superior performance or implementability; fewer or lesser adverse impacts than other available approaches; or lower costs for similar levels of performance than demonstrated treatment technologies.

(6) The no-action alternative, which may be no further action if some removal or remedial action has already occurred at the site, shall be developed.

(7) As appropriate, and to the extent sufficient information is available, the short- and long-term aspects of the following three criteria shall be used to guide the development and screening of remedial alternatives:

(i) *Effectiveness.* This criterion focuses on the degree to which an alternative reduces toxicity, mobility, or volume through treatment, minimizes residual risks and affords long-term protection, complies with ARARs, minimizes short-term impacts, and how quickly it achieves protection. Alternatives providing significantly less effectiveness than other, more promising alternatives may be eliminated. Alternatives that do not provide adequate protection of human health and the environment shall be eliminated from further consideration.

(ii) *Implementability.* This criterion focuses on the technical feasibility and availability of the technologies each alternative would employ and the administrative feasibility of implementing the alternative. Alternatives that are technically or administratively infeasible or that would require equipment, specialists, or facilities that are not available within a reasonable period of time may be eliminated from further consideration.

(iii) *Cost.* The costs of construction and any long-term costs to operate and maintain the alternatives shall be considered. Costs that are grossly excessive compared to the overall effectiveness of alternatives may be

considered as one of several factors used to eliminate alternatives. Alternatives providing effectiveness and implementability similar to that of another alternative by employing a similar method of treatment or engineering control, but at greater cost, may be eliminated.

(8) The lead agency shall notify the support agency of the alternatives that will be evaluated in detail to facilitate the identification of ARARs and, as appropriate, pertinent advisories, criteria, or guidance to be considered.

(9) *Detailed analysis of alternatives.*

(i) A detailed analysis shall be conducted on the limited number of alternatives that represent viable approaches to remedial action after evaluation in the screening stage. The lead and support agencies must identify their ARARs related to specific actions in a timely manner and no later than the early stages of the comparative analysis. The lead and support agencies may also, as appropriate, identify other pertinent advisories, criteria, or guidance in a timely manner.

(ii) The detailed analysis consists of an assessment of individual alternatives against each of nine evaluation criteria and a comparative analysis that focuses upon the relative performance of each alternative against those criteria.

(iii) *Nine criteria for evaluation.* The analysis of alternatives under review shall reflect the scope and complexity of site problems and alternatives being evaluated and consider the relative significance of the factors within each criteria. The nine evaluation criteria are as follows:

(A) *Overall protection of human health and the environment.* Alternatives shall be assessed to determine whether they can adequately protect human health and the environment, in both the short- and long-term, from unacceptable risks posed by hazardous substances, pollutants, or contaminants present at the site by eliminating, reducing, or controlling exposures to levels established during development of remediation goals consistent with § 300.430(e)(2)(i). Overall protection of human health and the environment draws on the assessments of other evaluation criteria, especially long-term effectiveness and permanence, short-term effectiveness, and compliance with ARARs.

(B) *Compliance with ARARs.* The alternatives shall be assessed to determine whether they attain applicable or relevant and appropriate requirements under federal environmental laws and state environmental or facility siting laws or

provide grounds for invoking one of the waivers under paragraph (f)(1)(ii)(C) of this section.

(C) *Long-term effectiveness and permanence.* Alternatives shall be assessed for the long-term effectiveness and permanence they afford, along with the degree of certainty that the alternative will prove successful. Factors that shall be considered, as appropriate, include the following:

(1) Magnitude of residual risk remaining from untreated waste or treatment residuals remaining at the conclusion of the remedial activities. The characteristics of the residuals should be considered to the degree that they remain hazardous, taking into account their volume, toxicity, mobility, and propensity to bioaccumulate.

(2) Adequacy and reliability of controls such as containment systems and institutional controls that are necessary to manage treatment residuals and untreated waste. This factor addresses in particular the uncertainties associated with land disposal for providing long-term protection from residuals: the assessment of the potential need to replace technical components of the alternative, such as a cap, a slurry wall, or a treatment system; and the potential exposure pathways and risks posed should the remedial action need replacement.

(D) *Reduction of toxicity, mobility, or volume through treatment.* The degree to which alternatives employ recycling or treatment that reduces toxicity, mobility, or volume shall be assessed, including how treatment is used to address the principal threats posed by the site. Factors that shall be considered, as appropriate, include the following:

(1) The treatment or recycling processes the alternatives employ and materials they will treat;

(2) The amount of hazardous substances, pollutants, or contaminants that will be destroyed, treated, or recycled;

(3) The degree of expected reduction in toxicity, mobility, or volume of the waste due to treatment or recycling and the specification of which reduction(s) are occurring;

(4) The degree to which the treatment is irreversible;

(5) The type and quantity of residuals that will remain following treatment, considering the persistence, toxicity, mobility, and propensity to bioaccumulate of such hazardous substances and their constituents; and

(6) The degree to which treatment reduces the inherent hazards posed by principal threats at the site.

(E) *Short-term effectiveness.* The short-term impacts of alternatives shall be assessed considering the following:

- (1) Short-term risks that might be posed to the community during implementation of an alternative;
- (2) Potential impacts on workers during remedial action and the effectiveness and reliability of protective measures;
- (3) Potential environmental impacts of the remedial action and the effectiveness and reliability of mitigative measures during implementation; and
- (4) Time until protection is achieved.

(F) *Implementability.* The ease or difficulty of implementing the alternatives shall be assessed by considering the following types of factors as appropriate:

- (1) Technical feasibility, including technical difficulties and unknowns associated with the construction and operation of a technology, the reliability of the technology, ease of undertaking additional remedial actions, and the ability to monitor the effectiveness of the remedy.
- (2) Administrative feasibility, including activities needed to coordinate with other offices and agencies and the ability and time required to obtain any necessary approvals and permits from other agencies (for off-site actions);
- (3) Availability of services and materials, including the availability of adequate off-site treatment, storage capacity, and disposal capacity and services; the availability of necessary equipment and specialists, and provisions to ensure any necessary additional resources; the availability of services and materials; and availability of prospective technologies.

(G) *Cost.* The types of costs that shall be assessed include the following:

- (1) Capital costs, including both direct and indirect costs;
- (2) Annual operation and maintenance costs; and
- (3) Net present value of capital and O&M costs.

(H) *State acceptance.* Assessment of state concerns may not be completed until comments on the RI/FS are received but may be discussed, to the extent possible, in the proposed plan issued for public comment. The state concerns that shall be assessed include the following:

- (1) The state's position and key concerns related to the preferred alternative and other alternatives; and
- (2) State comments on ARARs or the proposed use of waivers.

(I) *Community acceptance.* This assessment includes determining which components of the alternatives

interested persons in the community support, have reservations about, or oppose. This assessment may not be completed until comments on the proposed plan are received.

(f) Selection of remedy.—(1) Remedies selected shall reflect the scope and purpose of the actions being undertaken and how the action relates to long-term, comprehensive response at the site.

(i) The criteria noted in paragraph (e)(9)(iii) of this section are used to select a remedy. These criteria are categorized into three groups.

(A) *Threshold criteria.* Overall protection of human health and the environment and compliance with ARARs (unless a specific ARAR is waived) are threshold requirements that each alternative must meet in order to be eligible for selection.

(B) *Primary balancing criteria.* The five primary balancing criteria are long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost.

(C) *Modifying criteria.* State and community acceptance are modifying criteria that shall be considered in remedy selection.

(ii) The selection of a remedial action is a two-step process and shall proceed in accordance with § 300.515(e). First, the lead agency, in conjunction with the support agency, identifies a preferred alternative and presents it to the public in a proposed plan, for review and comment. Second, the lead agency shall review the public comments and consult with the state (or support agency) in order to determine if the alternative remains the most appropriate remedial action for the site or site problem. The lead agency, as specified in § 300.515(e), makes the final remedy selection decision, which shall be documented in the ROD. Each remedial alternative selected as a Superfund remedy will employ the criteria as indicated in paragraph (f)(1)(i) of this section to make the following determination:

(A) Each remedial action selected shall be protective of human health and the environment.

(B) On-site remedial actions selected in a ROD must attain those ARARs that are identified at the time of ROD signature or provide grounds for invoking a waiver under § 300.430(f)(1)(ii)(C).

(1) Requirements that are promulgated or modified after ROD signature must be attained (or waived) only when determined to be applicable or relevant and appropriate and necessary to ensure that the remedy is protective of human health and the environment.

(2) Components of the remedy not described in the ROD must attain (or waive) requirements that are identified as applicable or relevant and appropriate at the time the amendment to the ROD or the explanation of significant difference describing the component is signed.

(C) An alternative that does not meet an ARAR under federal environmental or state environmental or facility siting laws may be selected under the following circumstances:

(1) The alternative is an interim measure and will become part of a total remedial action that will attain the applicable or relevant and appropriate federal or state requirement;

(2) Compliance with the requirement will result in greater risk to human health and the environment than other alternatives;

(3) Compliance with the requirement is technically impracticable from an engineering perspective;

(4) The alternative will attain a standard of performance that is equivalent to that required under the otherwise applicable standard, requirement, or limitation through use of another method or approach;

(5) With respect to a state requirement, the state has not consistently applied, or demonstrated the intention to consistently apply, the promulgated requirement in similar circumstances at other remedial actions within the state; or

(6) For Fund-financed response actions only, an alternative that attains the ARAR will not provide a balance between the need for protection of human health and the environment at the site and the availability of Fund monies to respond to other sites that may present a threat to human health and the environment.

(D) Each remedial action selected shall be cost-effective, provided that it first satisfies the threshold criteria set forth in § 300.430(f)(1)(ii) (A) and (B). Cost-effectiveness is determined by evaluating the following three of the five balancing criteria noted in § 300.430(f)(1)(i)(B) to determine overall effectiveness: long-term effectiveness and permanence, reduction of toxicity, mobility, or volume through treatment, and short-term effectiveness. Overall effectiveness is then compared to cost to ensure that the remedy is cost-effective. A remedy shall be cost-effective if its costs are proportional to its overall effectiveness.

(E) Each remedial action shall utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum

extent practicable. This requirement shall be fulfilled by selecting the alternative that satisfies paragraph (f)(1)(ii) (A) and (B) of this section and provides the best balance of trade-offs among alternatives in terms of the five primary balancing criteria noted in paragraph (f)(1)(i)(B) of this section. The balancing shall emphasize long-term effectiveness and reduction of toxicity, mobility, or volume through treatment. The balancing shall also consider the preference for treatment as a principal element and the bias against off-site land disposal of untreated waste. In making the determination under this paragraph, the modifying criteria of state acceptance and community acceptance described in paragraph (f)(1)(i)(C) of this section shall also be considered.

(2) *The proposed plan.* In the first step in the remedy selection process, the lead agency shall identify the alternative that best meets the requirements in § 300.430(f)(1), above, and shall present that alternative to the public in a proposed plan. The lead agency, in conjunction with the support agency and consistent with § 300.515(e), shall prepare a proposed plan that briefly describes the remedial alternatives analyzed by the lead agency, proposes a preferred remedial action alternative, and summarizes the information relied upon to select the preferred alternative. The selection of remedy process for an operable unit may be initiated at any time during the remedial action process. The purpose of the proposed plan is to supplement the RI/FS and provide the public with a reasonable opportunity to comment on the preferred alternative for remedial action, as well as alternative plans under consideration, and to participate in the selection of remedial action at a site. At a minimum, the proposed plan shall:

(i) Provide a brief summary description of the remedial alternatives evaluated in the detailed analysis established under paragraph (e)(9) of this section;

(ii) Identify and provide a discussion of the rationale that supports the preferred alternative;

(iii) Provide a summary of any formal comments received from the support agency; and

(iv) Provide a summary explanation of any proposed waiver identified under paragraph (f)(1)(ii)(C) of this section from an ARAR.

(3) *Community relations to support the selection of remedy.* (i) The lead agency, after preparation of the proposed plan and review by the support agency, shall conduct the following activities:

(A) Publish a notice of availability and brief analysis of the proposed plan in a major local newspaper of general circulation;

(B) Make the proposed plan and supporting analysis and information available in the administrative record required under subpart I of this part;

(C) Provide a reasonable opportunity, not less than 30 calendar days, for submission of written and oral comments on the proposed plan and the supporting analysis and information located in the information repository, including the RI/FS. Upon timely request, the lead agency will extend the public comment period by a minimum of 30 additional days;

(D) Provide the opportunity for a public meeting to be held during the public comment period at or near the site at issue regarding the proposed plan and the supporting analysis and information;

(E) Keep a transcript of the public meeting held during the public comment period pursuant to CERCLA section 117(a) and make such transcript available to the public; and

(F) Prepare a written summary of significant comments, criticisms, and new relevant information submitted during the public comment period and the lead agency response to each issue. This responsiveness summary shall be made available with the record of decision.

(ii) After publication of the proposed plan and prior to adoption of the selected remedy in the record of decision, if new information is made available that significantly changes the basic features of the remedy with respect to scope, performance, or cost, such that the remedy significantly differs from the original proposal in the proposed plan and the supporting analysis and information, the lead agency shall:

(A) Include a discussion in the record of decision of the significant changes and reasons for such changes, if the lead agency determines such changes could be reasonably anticipated by the public based on the alternatives and other information available in the proposed plan or the supporting analysis and information in the administrative record; or

(B) Seek additional public comment on a revised proposed plan, when the lead agency determines the change could not have been reasonably anticipated by the public based on the information available in the proposed plan or the supporting analysis and information in the administrative record. The lead agency shall, prior to adoption of the selected remedy in the ROD, issue

a revised proposed plan, which shall include a discussion of the significant changes and the reasons for such changes, in accordance with the public participation requirements described in paragraph (f)(3)(i) of this section.

(4) *Final remedy selection.* (i) In the second and final step in the remedy selection process, the lead agency shall reassess its initial determination that the preferred alternative provides the best balance of trade-offs, now factoring in any new information or points of view expressed by the state (or support agency) and community during the public comment period. The lead agency shall consider state (or support agency) and community comments regarding the lead agency's evaluation of alternatives with respect to the other criteria. These comments may prompt the lead agency to modify aspects of the preferred alternative or decide that another alternative provides a more appropriate balance. The lead agency, as specified in § 300.515(e), shall make the final remedy selection decision and document that decision in the ROD.

(ii) If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after initiation of the selected remedial action.

(iii) The process for selection of a remedial action at a federal facility on the NPL, pursuant to CERCLA section 120, shall entail:

(A) Joint selection of remedial action by the head of the relevant department, agency, or instrumentality and EPA; or

(B) If mutual agreement on the remedy is not reached, selection of the remedy is made by EPA.

(5) *Documenting the decision.* (i) To support the selection of a remedial action, all facts, analyses of facts, and site-specific policy determinations considered in the course of carrying out activities in this section shall be documented, as appropriate, in a record of decision, in a level of detail appropriate to the site situation, for inclusion in the administrative record required under subpart I of this part. Documentation shall explain how the evaluation criteria in paragraph (e)(9)(iii) of this section were used to select the remedy.

(ii) The ROD shall describe the following statutory requirements as they relate to the scope and objectives of the action:

(A) How the selected remedy is protective of human health and the